

REMARKS

In the specification, the first paragraph has been amended to correct the omission of the priority information, which was inadvertently not mentioned in the first sentence of the specification. The new paragraph shall read as follows:

Priority Information

This application claims priority under 35 U.S.C. 119(3) to U.S. Provisional Application Serial No. 60/462,396, which was filed on April 11, 2003.

Claims 1-20 are currently pending in this application. By this Amendment, claim 21 is cancelled, and claims 1, 3, 5, 7, 11, 13-20 have been amended. The amended claims set are provided herewith.

Claim Objections

Claims 5-20 are objected to because of informalities in claim 5, claim 7, and claim 13. Applicants have amended these claims and believe the informalities have been removed.

§ 112 Rejection of the Claims

Claims 3 and 5-20 have been rejected as being indefinite under 35 U.S.C. § 112, second paragraph for failing to particularly point out and distinctly claim the subject matter which application regards as the invention. Applicants have amended the claims to remove the indefiniteness, and withdrawal of this rejection is respectfully requested.

§ 102 Rejection of the Claims

Claim 1 is rejected under 35 U.S.C. § 102(a) as being anticipated by Insatsu, JP 57185981 ('981). Applicants assert that the invention as presently claimed is not anticipated by Insatsu: Claim 1 is directed to method of protecting the interior of a mold, the method comprising providing a mold; coating the interior of the mold with an etchant-resistant material; applying a photosensitive mask over a portion of the etchant-resistant material while leaving other portions of the etchant-resistant material exposed; selectively removing the exposed

portions of the etchant-resistant material; and etching those portions of the mold that are exposed.

Thus the present invention provides a photosensitive mask over an etchant-resistant material (typically an acid-resistant material). In addition, the photosensitive mask of the presently claimed invention does not come in contact with the mold surface, but rather in contact with the etchant-resistant material. Thus, this photosensitive mask is different and distinct from the etchant material. In contrast, in Insatsu, the resin is actually coated on the mold surface, and then photodegraded to expose the mold, which is then etched. This is significantly distinct from the presently claimed invention, because the presently claimed invention uses a separate etchant-resistant layer on the mold surface, and then covers this etchant-resist layer with a photoresist mask. After the etchant-resist layer is covered by the photoresist mask, portions of the etchant-resist layer are abraded to expose the metal surface of the mold, which is then etched.

Thus, the materials used, the position of the materials, the manner in which the materials are applied, and the function of the materials are all distinctly different between the claimed invention and Insatsu. Therefore, Applicants believe Insatsu to be an improper grounds for rejected the present claims under 35 U.S.C. § 102(a).

§ 103 Rejection of the Claims

Claims 2-4 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Insatsu ('981) in view of Kimura, U.S. Patent No. 6,333,135. The Examiner has used Insatsu as relied upon in the rejection of claim 1, and further asserts that Kimura discloses a stretchable mask, and other features of claims 2-4. Applicants respectfully assert that the claims as amended are unobvious because, as identified above, Insatsu fails to teach the claimed invention, even in view of Kimura. The materials used, the position of the materials, the manner in which the materials are applied, and the function of the materials are all distinctly different between the claimed invention and Insatsu. Nothing in Kimura corrects the deficiencies of Insatsu, and therefore withdrawal of this rejection is respectfully requested.

Claims 5-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Insatsu ('981) in view of Johnson, U.S. Patent No. 6,605,406 ('406) or Couture, U.S. Patent No. 5,415,971 ('971) and Kimura ('135). Applicants respectfully assert that the claims as amended

are unobvious because, as identified above, Insatsu fails to teach the claimed invention because the materials used, the position of the materials, the manner in which the materials are applied, and the function of the materials are all distinctly different between the claimed invention and Insatsu. Nothing in Johnson, U.S. Patent No. 6,605,406 ('406) or Couture, U.S. Patent No. 5,415,971 ('971) and Kimura ('135) corrects these deficiencies. Therefore, withdrawal of this rejection is respectfully requested.

Obviousness-Type Double Patenting Rejections

Claims 5, 8-9, 13 and 19-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2, 4, 8-9, 11 and 15 of prior U.S. Patent No. 6,037,106 ("the '106 patent"). Applicants respectfully disagree. The presently claimed invention requires coating the interior of a mold with an acid-resistant material, and then applying a photosensitive laminate over the acid-resistant material. Applicants are not aware of any disclosure in the '106 patent of an acid-resistant material. There is a teaching of use of an adhesive to coat a surface, but no teaching that said adhesive should be acid resistant, nor that such surface should be a mold surface. Therefore, Applicants respectfully asset that there is no proper double patenting grounds for rejection of the pending claims.

Claims 5, 8-9, 13 and 19-20 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2, 4, 8-19, 11 and 15 of U.S. Patent No. 6,037,106. As asserted above, Applicants are not aware of any disclosure in the '106 of an acid-resistant material. There is a teaching of use of an adhesive to coat a surface, but no teaching that said adhesive should be acid resistant, nor that such surface should be a mold surface. Therefore, Applicants respectfully asset that there is not a double patenting grounds for rejection of the claims.

Claims 1, 5, 8 and 13 and 15-20 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-13 and 15 of U.S. Patent No. 7,074,358 (the '358 patent). Applicants are aware of nothing in the '358 patent that teaches an acid-resistant material applied to a mold surface. There is a teaching of use of an adhesive to coat a surface, but no teaching that said adhesive should be acid resistant, nor that such surface should be a mold surface.

AMENDMENT AND RESPONSE

Serial Number: 10/822,223

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Title: Product and Method for Protecting Metal During Etching

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In view of the foregoing amendments, Applicants respectfully request reconsideration and allowance of the claims as all rejections have been overcome. Early notice of allowability is kindly requested.

The Examiner is respectfully requested to contact the undersigned by telephone at 612.746.4783 or by E-mail at dpauly@pdsdlaw.com with any questions or comments.

Please grant any extension of time, if necessary for entry of this paper, and charge any fee due for such extension or any other fee required in connection with this paper to Deposit Account No. 50-3688.

Respectfully Submitted,

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